Field Crops

Growing Season Weather Summary

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The 2009 growing season in Michigan was a major challenge to growers due to the combination of abnormally cool temperatures and several extended wet spells. Similar to the 2008 season, the 2009 growing season was preceded by a persistent high amplitude jet stream pattern characterized by large troughs across western and central North America set up just before Thanksgiving last fall and persisted into early March. Mean temperatures for the December through February winter months generally ranged from 2-5 degrees Fahrenheit (F.) below normal across the state. In terms of precipitation, winter totals generally ranged from near to slightly below normal levels across western sections of Upper Michigan to much above normal over large sections of the Lower Peninsula, where some areas received more than 200% of normal values. For the state as a whole, this past winter was among the wettest 10 percent of winters since 1895. Soil moisture levels at the beginning of April ranged from much above normal levels across southern and central sections of the state to drier than normal across some northern sections.

Wetter and somewhat cooler than normal weather during April and early May led to significant delays in spring fieldwork and planting across the region. As of the 10th of May, when historically more than half the corn crop is usually planted, only 18% had been planted (USDA/NASS, 2009). An upper air pattern shift led to warmer temperatures and more seasonable conditions during late May.

During early June an upper air pattern set up across North America that would persist for much of the remainder of June and much of July. In addition to the cooler than normal temperatures, the northwesterly upper air pattern also reduced the amount of Gulf of Mexico-origin moisture reaching the region. Precipitation totals for June and July generally fell to much below normal levels, with many western and northern sections of the state reporting less than 50% of normal rainfall. Following a cooler than normal June with mean temperatures generally from 0.5-2.5 degrees F. below normal. July mean temperatures across Michigan generally ranged from 3-6 degrees F. below normal, with an overall statewide mean only slightly warmer than the standing record set in 1992. Records for the coolest July on record were set at many individual sites across the Midwest. The cool weather slowed growth and development rates of almost all crops, and phenological development lagged more than two weeks behind historical averages by month's end.

During early August, the large upper air ridge that brought heat and dryness to much of the western U.S. temporarily moved eastward to the Midwest and east, providing somewhat warmer temperatures. Cooler weather returned in late August, with mean temperatures for the month generally remaining from 1-3 degrees F. below the climatological normals. In one of the most important weather developments during the season, an upper air ridging pattern set up across the central U.S. during early September, leading to an extended period of warmer and drier than normal weather. Mean temperatures for the month ranged from near to 3 degrees F. above normal, the only month of the season with above normal temperatures. Frost and freezing temperatures brought an end to the growing season in some scattered northern areas of the state on the 19th, and to much of the remainder of the state on the morning of October 1st. Some areas of the Saginaw Valley and Thumb regions of the state missed both these events and did not experience a killing freeze until the 11th of the month.

With a return of upper air troughing across the region, weather for crop maturation, field drydown, and early harvest was very poor during October. Mean temperatures fell back to below normal levels and precipitation totals surged well above the historical averages. Some western sections of the state reported more than 20 days of the month with precipitation, with very few if any fieldwork opportunities. Milder and drier than normal weather returned during early November and persisted through Thanksgiving, allowing growers to finally catch up with harvesting.

Overall for the 5-month May-September period, precipitation totals ranged from much below normal levels across northern sections of the state (the fifth consecutive year in which this has occurred) to near normal in eastern sections of the state. Mean temperatures and seasonal growing degree day accumulations were well below the climatological normals, with seasonal base 50 F. growing degree day accumulations generally remaining from 100 to more than 400 units below normal. The greatest departures from normal were observed in the northern sections of the state. The combination of cool temperatures and persistent wet weather early in the season resulted in many crops lagging far behind normal phenological stages throughout the season, and to unusually high grain moisture levels and drying costs at the end of the season.

Field crops: Acres harvested and value of production, 2005-2009

Item	Unit	2005	2006	2007	2008	2009
Acres harvested	1,000 acres	6,481	6,441	6,459	6,454	6,301
Value of production	1,000 dollars	1,684,860	2,281,287	2,790,551	2,977,525	2,828,657

Grain storage capacity, December 1, 2005-2009

Year	Off farm		On farm capacity
	Facilities	Rated capacity	
	Number	*Million bushels*	*Million bushels*
2005	215	148	250
2006	211	155	260
2007	210	160	270
2008	205	165	270
2009	203	165	270

Field crops: Record highs and lows

Crop	Unit	Record high		Record low		Year estimates started
		Quantity	Year	Quantity	Year	
Barley						
Harvested acres	1,000 acres	303	1932	10	2008	1866
Yield per acre	Bushels	68.0	1985	13.5	1933	
Production	1,000 bu	8,400	1918	460	2008	
Dry Edible beans						
Harvested acres	1,000 acres	690	1930	130	2001	1909
Yield per acre	Pounds	2,100	1999	396	1916	
Production	1,000 cwt	8,585	1963	780	2001	
Corn for grain						
Harvested acres	1,000 acres	2,800	1981	480	1866	1866
Yield per acre	Bushels	148.0	2009	21.5	1917	
Production	1,000 bu	309,320	2009	15,120	1869	
Corn for silage						
Harvested acres	1,000 acres	498	1971	210	2003	1924
Yield per acre	Tons	18.0	2004	4.7	1930	
Production	1,000 tons	5,565	1977	1,542	1930	
Hay, alfalfa						
Harvested acres	1,000 acres	1,444	1950	74	1919	1919
Yield per acre	Tons	4.2	1993	1.1	1934	
Production	1,000 tons	5,040	1985,1986	118	1919	
Hay, all						
Harvested acres	1,000 acres	2,947	1924	780	1866	1866
Yield per acre	Tons	3.8	1993	0.6	1895	
Production	1,000 tons	5,895	2004	1,014	1866	
Oats						
Harvested acres	1,000 acres	1,658	1918	55	2001,2007,2009	1866
Yield per acre	Bushels	70.0	2003	18.5	1921	
Production	1,000 bu	69,388	1946	3,080	2007	
Potatoes						
Harvested acres	1,000 acres	374.0	1895	36.4	1975	1866
Yield per acre	Cwt	360.0	2009	26.0	1887,1916	
Production	1,000 cwt	23,256	1904	3,557	1876	
Soybeans						
Harvested acres	1,000 acres	2,130	2001	1	1930	1924
Yield per acre	Bushels	46.0	2006	8.0	1927	
Production	1,000 bu	91,540	2006	10	1930	
Spearmint						
Harvested acres	1,000 acres	8.7	1954	0.7	1935	1935
Yield per acre	Pounds	65.0	2009	20.0	1965	
Production	1,000 lbs	280	1948	27	1996	
Sugarbeets						
Harvested acres	1,000 acres	190	1999	48	1943,1953	1909
Yield per acre	Tons	28.7	2008	5.5	1916	
Production	1,000 tons	3,903	2008	298	1943	
Wheat, winter						
Harvested acres	1,000 acres	1,515	1953	400	1987	1909
Yield per acre	Bushels	73.0	2006	10.5	1912	
Production	1,000 bu	48,990	2008	7,350	1912	

Barley

Michigan barley growers planted 13,000 acres and harvested 11,000 acres in 2009. Total production was 561,000 bushels, up 22 percent from 2008. The average yield increased by 5 bushels to 51 bushels per acre. Barley planting began in April but was behind the five-year average. The crop benefitted from the cool, wet temperatures early in the growing season. At the end of May, early planted fields were slightly damaged due to the abundance of moisture; late planted fields were not affected. The majority of the crop was in good condition throughout the growing season. Harvest began and was completed during the month of August.

Barley: Acres, yield, production, and value, 2005-2009

Year	Planted	Harvested	Yield	Production	Price [1]	Value of production
	1,000 acres	*1,000 acres*	*Bushels*	*1,000 bushels*	*Dollars*	*1,000 dollars*
2005	15	11	47	517	1.80	931
2006	15	14	49	686	1.80	1,235
2007	14	13	51	663	2.50	1,658
2008	12	10	46	460	3.25	1,495
2009	13	11	51	561	2.80	1,571

[1] Marketing year average.

Corn

There were 2.35 million acres planted to corn in 2009, down 50,000 acres from 2008. Grain corn production was 309.3 million bushels, up 5 percent from 2008; 2.09 million acres were harvested for grain. The record high yield of 148 bushels per acre was up 10 bushels per acre from the 2008 crop. Farmers harvested 220,000 acres of corn for silage; the average yield was 15.5 tons per acre.

Planting of corn in Michigan began in earnest about April 27, well behind normal. Wet cool conditions prevailed during May, and planting progress remained about 10 days behind average. Planting was done about June 10. Emergence was also well behind; by June 15 corn plants had not emerged on almost 5 percent of the acres; cumulative growing degree days were well behind normal for the northern half of the major corn growing area. About 70 percent of the crop was rated good to excellent in mid-June. Crop development was about ten days behind normal throughout the growing season. There was plentiful rainfall across all major corn-growing areas throughout the year except in July. Rainfall in August, however, was above normal. There was virtually no heat stress. Sixty percent of the acreage was rated good or excellent at the outset of September. Michigan corn harvest began about October 1. Only about one-third of the crop was mature, well behind normal. Cold wet weather throughout October caused slow dry down of grain and difficulty combining in wet fields. Only 10 percent of acres were harvested November 1, about 3 weeks behind the average progress of 55 percent.

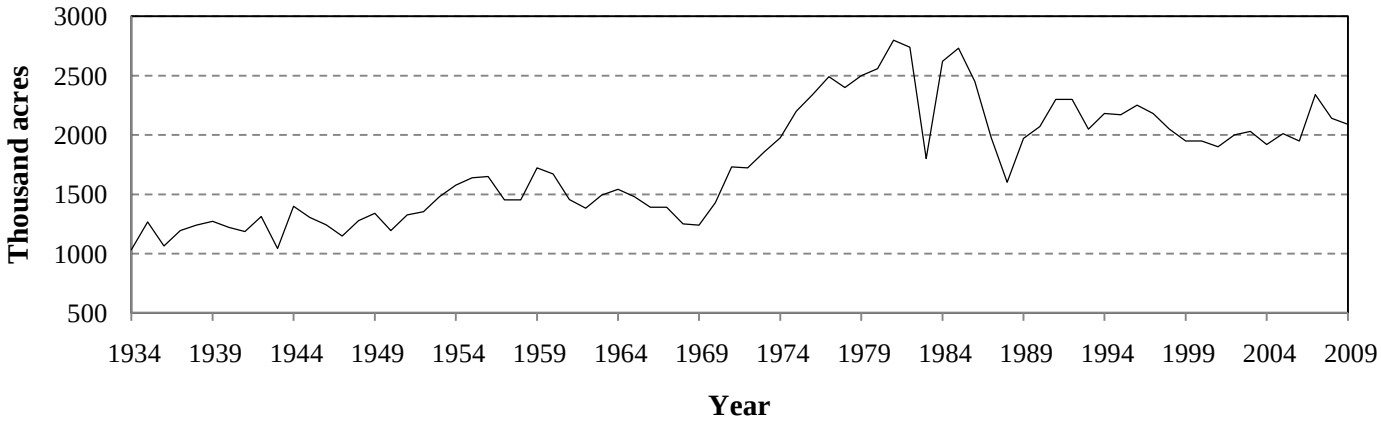
The 2009 corn crop was valued at $1.12 billion, down 1 percent from 2008. Corn continued to be Michigan's number one crop in value of production. The top three counties in corn production were Huron, Saginaw, and Lenawee in 2009.

Corn: Acres, yield, production, and value, 2005-2009

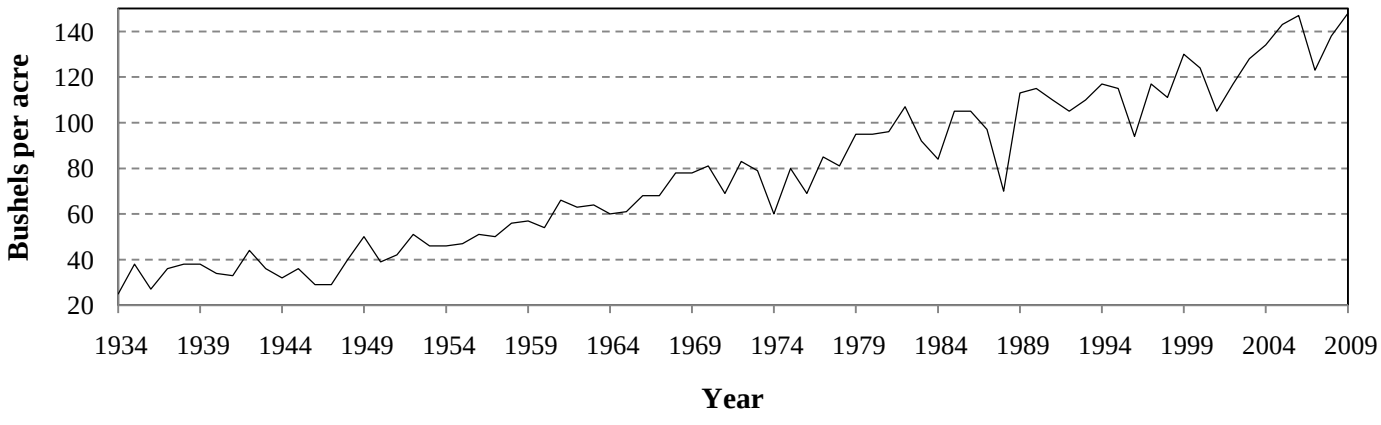
Year	Planted	Harvested	Yield	Production	Price [1]	Value of production
	1,000 acres	*1,000 acres*	*Bushels*	*1,000 bushels*	*Dollars*	*1,000 dollars*
All						
2005	2,250					
2006	2,200					
2007	2,650					
2008	2,400					
2009	2,350					
Grain						
2005		2,010	143	287,430	1.88	540,368
2006		1,950	147	286,650	3.10	888,615
2007		2,340	123	287,820	4.37	1,257,773
2008		2,140	138	295,320	3.84	1,134,029
2009		2,090	148	309,320	3.60	1,118,880
	1,000 acres	*1,000 acres*	*Tons*	*1,000 tons*		
Silage						
2005		230	17.5	4,025		
2006		240	16.5	3,960		
2007		295	14.5	4,278		
2008		250	16.5	4,125		
2009		220	15.5	3,410		

[1] Marketing year average.

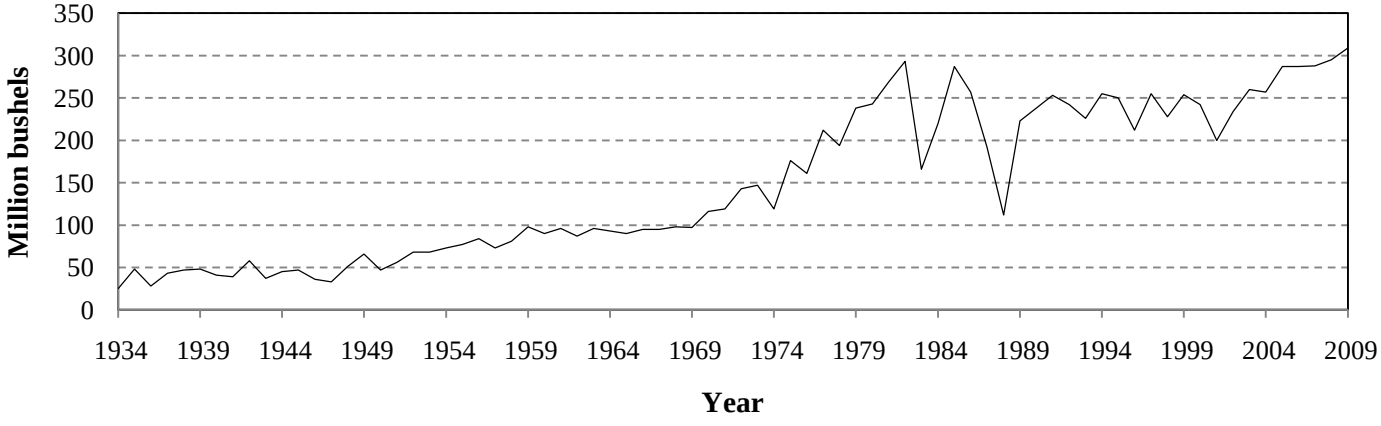
Corn for grain acres, 1934-2009



Corn yield, 1934-2009



Corn production, 1934-2009



Corn for grain: Stocks by quarter, 2005-2009

Crop year	December 1		March 1		June 1		September 1	
	On farm	Off farm	On farm	Off farm	On farm	Off farm	On farm	Off farm
	1,000 bushels	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
2005	165,000	71,900	110,000	56,500	65,000	39,000	31,000	15,000
2006	145,000	59,000	88,000	53,400	52,000	32,900	12,500	11,900
2007	140,000	64,500	87,000	53,100	43,000	46,200	14,000	18,900
2008	160,000	62,500	100,000	44,000	60,000	38,100	21,000	17,400
2009	195,000	50,900	100,000	55,200	55,000	37,857		

Corn: Percentage of acreage planted, 2005-2009

Year	Month and day					
	April		May			June
	20	30	10	20	30	10
2005	17	34	68	87	98	100
2006	3	31	69	84	93	100
2007	1	12	48	80	95	100
2008	1	24	66	87	97	100
2009	2	4	18	56	89	99
5-year-average	4.8	21.2	53.7	78.8	94.5	99.7

Corn: Percentage of acreage silked, 2005-2009

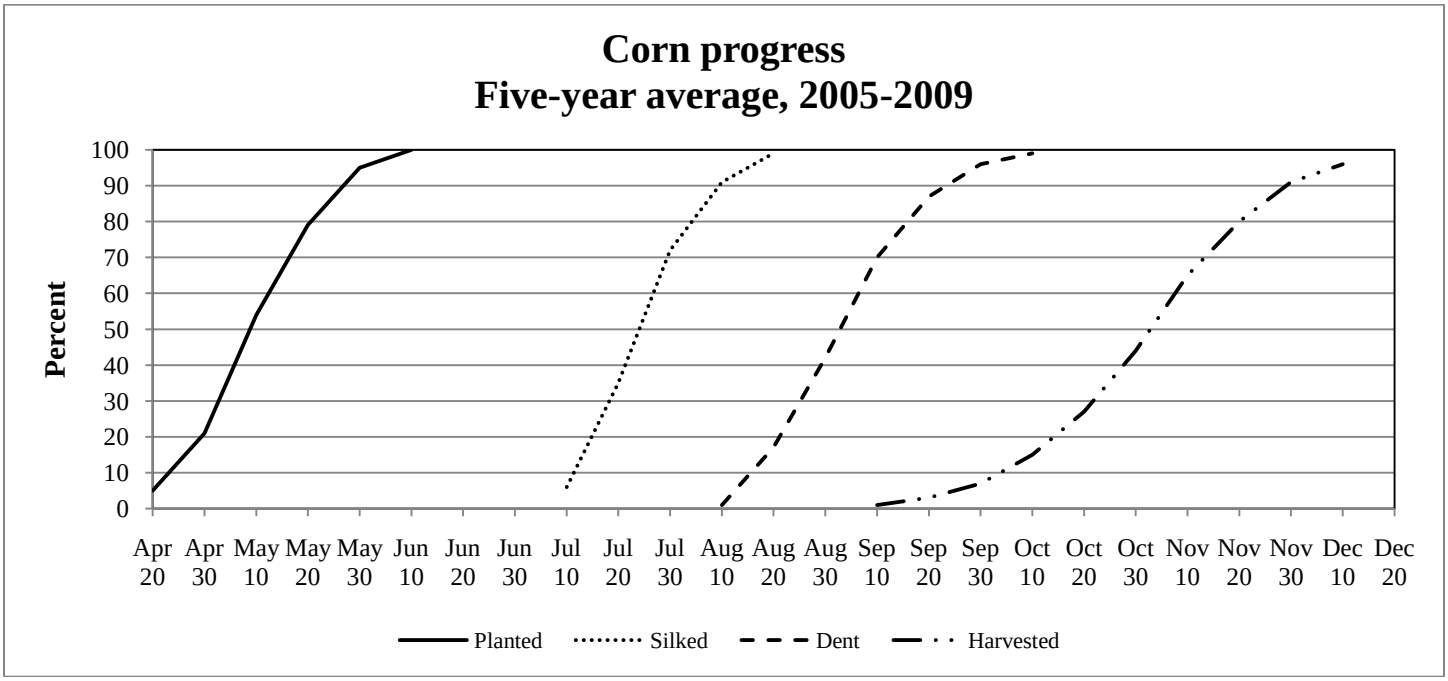
Year	Month and day					
	July				August	
	1	10	20	30	10	20
2005	0	7	47	91	97	100
2006	0	6	44	84	95	100
2007	0	14	50	77	94	100
2008	0	1	24	73	95	100
2009	0	1	8	37	74	94
5-year-average	0.0	5.7	34.6	72.3	90.9	98.7

Corn: Percentage of acreage dent stage, 2005-2009

Year	Month and day						
	August			September			October
	10	20	30	10	20	30	10
2005	0	20	55	84	97	99	100
2006	1	27	55	84	93	98	100
2007	2	22	45	77	92	100	100
2008	0	13	43	72	87	97	100
2009	0	1	13	32	64	84	93
5-year-average	0.6	16.8	42.2	70.0	86.6	95.7	98.7

Corn: Percentage of acreage harvested for grain, 2005-2009

Year	Month and day									
	September			October			November			December
	10	20	30	10	20	30	10	20	30	10
2005	2	7	14	28	48	75	91	96	99	100
2006	0	2	5	10	20	34	59	71	84	94
2007	0	4	12	23	35	57	81	92	99	100
2008	0	0	4	13	26	45	74	86	95	100
2009	0	0	0	3	4	9	21	53	77	88
5-year-average	0.5	2.5	7.1	15.3	26.5	43.9	65.2	79.7	90.8	96.3



Dry Edible Beans

Michigan dry bean planting started the week of May 18, 2009 and was completed by the end of June. Planting did slow in mid-June due to excessive rains. There was some replanting into July. Michigan dry bean harvest started the middle of September. White mold was reported in the Thumb region.

Michigan's 2009 total dry bean production was 3.51 million hundredweight (cwt), 13.8 percent of U.S. production. Michigan ranked second in dry bean production for 2009. The value of production was 115.5 million dollars, down 12 percent from 2008.

Dry edible beans: Acres, yield, production, and value, 2005-2009

Year	Planted	Harvested	Yield	Production	Price [1]	Value of production
	1,000 acres	*1,000 acres*	*Pounds*	*1,000 cwt*	*Dol/cwt*	*1,000 dollars*
2005	235	230	1,700	3,910	19.60	76,636
2006	225	215	1,900	4,085	21.10	86,194
2007	200	195	1,600	3,120	31.90	99,528
2008	200	195	1,850	3,607	36.30	130,934
2009	200	195	1,800	3,510	32.90	115,479

[1] Marketing year average.

Dry edible beans: Acres, yield, and production, by class, 2005-2009

Class and Year	Planted	Harvested	Yield	Production
	Acres	*Acres*	*Pounds*	*1,000 cwt*
Black				
2005	65,000	64,000	1,770	1,130
2006	91,600	86,600	1,930	1,670
2007	96,500	94,500	1,630	1,540
2008	91,000	89,000	1,900	1,691
2009	102,000	99,100	1,790	1,770
Cranberry				
2005	10,500	9,500	1,470	140
2006	8,000	7,900	1,460	115
2007	6,900	6,800	1,290	88
2008	7,200	7,000	1,540	108
2009	3,900	3,800	1,450	55
Great Northern				
2005	2,000	1,800	1,660	30
2006	500	500	2,000	10
2007 [1]				
2008 [1]				
2009 [1]				
Navy				
2005	75,500	74,500	1,760	1,310
2006	80,000	77,500	1,960	1,520
2007	61,000	59,500	1,660	990
2008	62,000	60,500	1,920	1,162
2009	52,000	51,100	1,910	976
Pinto				
2005	18,000	17,500	1,600	280
2006	5,000	4,900	1,900	93
2007	4,000	3,900	1,490	58
2008	1,800	1,700	1,880	32
2009	4,000	3,900	1,620	63
Red kidney, dark				
2005	8,000	7,700	1,430	110
2006	4,000	3,600	1,170	42
2007	2,300	2,000	900	18
2008	2,500	2,400	1,210	29
2009	2,000	1,900	1,160	22
Red kidney, light				
2005	17,000	16,800	1,430	240
2006	11,300	10,300	1,700	175
2007	8,600	8,400	1,180	99
2008	9,500	9,300	1,260	117
2009	9,100	9,000	1,540	139
Small, red				
2005	31,000	30,500	1,770	540
2006	20,000	19,500	2,000	390
2007	16,000	15,500	1,630	253
2008	22,400	21,800	1,950	425
2009	21,100	20,700	1,950	404
Other				
2005	8,000	7,700	1,688	130
2006	4,600	4,200	1,670	70
2007	4,700	4,400	1,680	74
2008	3,600	3,300	1,300	43
2009	5,900	5,500	1,470	81

[1] Included in Other class.

Hay and Haylage

Michigan hay production was estimated at 2.48 million tons, down from 2.63 in 2008. Alfalfa and alfalfa mixtures accounted for 79 percent of all dry hay produced. All hay harvested acres were estimated at 0.99 million, down from 1.02 million in 2008. The average all hay yield was 2.51 tons per acre, down from 2.58 the previous year. In early June, harvest was in full swing but growers reported winter kill had affected their tonnage in comparison to last year. June and July progressed slowly due to lack of moisture and cool temperatures. Cool and damp conditions in August slowed progress of Michigan's hay crop but September was a better month for making hay. Alfalfa accounted for 700,000 acres of the total harvested with a yield of 2.8 tons per acre. Other hay accounted for 290,000 acres with a yield of 1.8 tons per acre. The value of the hay crop was $352 million, down 12 percent from 2008.

Hay, haylage, and greenchop: Acres, yield, production, and value, 2005-2009

Year	Planted	Harvested	Yield	Production	Price [1]	Value of production
	1,000 acres	*1,000 acres*	*Tons*	*1,000 tons*	*Dollars*	*1,000 dollars*
All dry hay						
2005		1,150	2.63	3,020	90.00	269,340
2006		1,120	2.87	3,212	94.00	300,404
2007		1,050	2.31	2,429	124.00	299,411
2008		1,020	2.58	2,633	153.00	401,948
2009		990	2.51	2,482	142.00	352,454
Alfalfa hay						
2005		900	2.80	2,520	92.00	231,840
2006		810	3.20	2,592	97.00	251,424
2007		770	2.50	1,925	127.00	244,475
2008		770	2.90	2,233	156.00	348,348
2009		700	2.80	1,960	146.00	286,160
Alfalfa seedings						
2005	135					
2006	120					
2007	100					
2008	115					
2009	90					
Other hay						
2005		250	2.00	500	75.00	37,500
2006		310	2.00	620	79.00	48,980
2007		280	1.80	504	109.00	54,936
2008		250	1.60	400	134.00	53,600
2009		290	1.80	522	127.00	66,294
All haylage and greenchop						
2005		320	6.50	2,080		
2006		300	6.64	1,992		
2007		270	6.70	1,810		
2008		285	6.24	1,778		
2009		315	5.08	1,601		
Alfalfa haylage and greenchop						
2005		300	6.70	2,010		
2006		280	6.90	1,932		
2007		250	7.00	1,750		
2008		270	6.40	1,728		
2009		290	5.20	1,508		

[1] Marketing year average.

Hay: Stocks on farms, 2006-2010

Year	May 1	December 1
	1,000 tons	*1,000 tons*
2006	395	2,385
2007	350	1,700
2008	320	1,998
2009	450	1,451
2010	330	([1])

[1] Published in January 2011.

Maple Syrup

Michigan maple syrup production was estimated at 82,000 gallons for the 2010 season, 29 percent below 2009 production. Less than optimal weather conditions decreased yield, thereby, decreasing production. There was not enough moisture or enough days and nights of freezing and thawing. The length of the season was 20 days, compared to 25 days in 2009. Michigan was ranked sixth in maple syrup production in 2010 and produced 4 percent of the total U.S. production. Total taps were 490,000, and the syrup yield was 0.167 gallons per tap. The average price per gallon sold for 2009 production was $45.00, and the value of production was $5.175 million, up from $4.305 million in 2008.

Maple syrup: Taps, yield, production, price, and value, 2006-2010

Year	Taps	Yield per tap	Production	Price per gallon	Value of production
	1,000	*Gallons*	*1,000 gallons*	*Dollars*	*1,000 dollars*
2006	375	0.208	78	37.00	2,886
2007	390	0.167	65	41.60	2,704
2008	405	0.259	105	41.00	4,305
2009	450	0.256	115	45.00	5,175
2010	490	0.167	82	([1])	([1])

[1] Published in June 2011.

Mint

Mint: Acres, yield, production, and value, 2005-2009

Year	Harvested	Yield	Production	Price per pound [1]	Value of production
	1,000 acres	*Pounds*	*1,000 Pounds*	*Dollars*	*1,000 dollars*
Peppermint					
2005	1.0	35	35	12.00	420
2006	0.7	50	35	13.50	473
2007	0.7	40	28	14.40	403
2008	0.8	45	36	28.00	1,008
2009	0.6	60	36	18.00	648
Spearmint					
2005	1.6	35	56	9.50	532
2006	1.6	60	96	10.00	960
2007	1.5	60	90	12.00	1,080
2008	1.5	60	90	15.00	1,350
2009	1.6	65	104	13.00	1,352

[1] Marketing year average.

Oats

There was a decrease in oat acreage for the State in 2009. Growers planted 70,000 acres of oats in 2009, compared with 75,000 the previous year. Harvested acres, at 55,000, were down 5,000 from last year. Harvested acres were at a record low this year tying with 2007 and 2001. The 2009 oat production was 3.5 million bushels, down 12 percent from the previous year. Yield, at 63 bushels per acre, was down 3 bushels from 2008.

Oat planting was nearly complete by the middle of May. The crop progressed well, but was slightly damaged from the abundance of rain we experienced at the end of May. Disease and insect pressure remained low through the summer. The crop was turning color quickly with harvest beginning in select areas towards the end of July. Oats in central Michigan were slow to turn and were not turning evenly in mid July. Harvest was in full swing at the middle of August and was essentially completed by early September. For 2009, Sanilac County was ranked first in oat production, while Montcalm, Presque Isle, Huron, and Isabella rounded out the top five counties.

Oats: Acres, yield, production, and value, 2005-2009

Year	Planted	Harvested	Yield	Production	Price [1]	Value of production
	1,000 acres	*1,000 acres*	*Bushels*	*1,000 bushels*	*Dollars*	*1,000 dollars*
2005	90	75	61	4,575	1.89	8,647
2006	80	65	62	4,030	1.93	7,778
2007	70	55	56	3,080	2.91	8,963
2008	75	60	66	3,960	3.40	13,464
2009	70	55	63	3,465	2.25	7,796

[1] Marketing year average.

Potatoes

Michigan's 2009 potato production was 15.66 million hundredweight, up 5 percent from 14.88 million in 2008. Planted acres were 45,000 and harvested acres were 43,500. The average yield was a record high 360 cwt. per acre. In 2009 Michigan again ranked eighth among states in potato production. The value of 2009 production was 164.4 million dollars, up 9 percent from 2008.

Potato planting began the middle of April and was completed in a timely manner due to good planting conditions. Emergence was also good. There has been above normal rain this season with plants in good to excellent condition. By the first part of July, early planted fresh potatoes had appeared at farmers markets. Some leafhopper pressure was reported in various regions of the State. Potatoes grew well through the summer with cool temperatures and timely rains. Early harvest for farm markets began in July. Late season rains caused some storage problems. Some late blight was reported across the State and farmers were able to take timely corrective action when needed. As of November 1, 95 percent of the potatoes were harvested.

Fall potatoes: Acres, yield, production, and value, 2005-2009

Year	Planted	Harvested	Yield	Production	Price [1]	Value of production
	1,000 acres	*1,000 acres*	*Cwt*	*1,000 cwt*	*Dollars*	*1,000 dollars*
2005	43.0	42.8	325	13,910	7.95	110,585
2006	43.5	43.0	330	14,190	8.35	118,487
2007	42.5	42.0	350	14,700	8.45	124,215
2008	43.0	42.5	350	14,875	10.10	150,238
2009	45.0	43.5	360	15,660	10.50	164,430

[1] Marketing year average.

Fall potatoes: Stocks by type as percent of total stocks, December 1, 2005-2009

Type	2005	2006	2007	2008	2009
	Percent	*Percent*	*Percent*	*Percent*	*Percent*
White	87	87	86	83	89
Russet	12	12	12	15	10
Red	1	1	1	1	1
Yellow [1]	0	0	1	1	0

[1] Estimates began in 2007.

Fall potatoes: Production and disposition, 2005-2009

Crop year	Production	Total used for seed	Farm Disposition		Sold
			Seed, feed, and home use	Shrinkage and loss	
	1,000 cwt	*1,000 cwt*	*1,000 cwt*	*1,000 cwt*	*1,000 cwt*
2005	13,910	1,044	182	1,728	12,000
2006	14,190	961	180	1,800	12,210
2007	14,700	1,046	185	1,815	12,700
2008	14,875	1,089	210	1,265	13,400
2009	15,660	([1])	([1])	([1])	([1])

[1] Published in September 2010

Fall potatoes: Stocks, 2005-2009

Crop year	December 1	January 1	February 1	March 1	April 1	May 1
	1,000 cwt	*1,000 cwt*	*1,000 cwt*	*1,000 cwt*	*1,000 cwt*	*1,000 cwt*
2005	7,900	6,200	4,500	3,100	1,700	500
2006	8,100	6,300	4,600	3,300	1,800	700
2007	8,800	7,000	5,300	3,700	2,100	800
2008	8,300	6,600	4,800	3,300	1,800	700
2009	8,700	7,000	5,200	3,200	1,200	([1])

[1] Withheld to avoid disclosure of individual operations.

Soybeans

Michigan soybean production totaled 79.6 million bushels, up 14 percent from 2008. The yield was 40 bushels per acre in 2009, up 3 bushels per acre from the previous year. Planted acres increased by 100,000 acres over last year's total to 2.0 million acres in 2009. Harvested acres increased accordingly to 1.99 million. Soybean prices fell by 4 percent from 2008. Michigan's soybean crop was well behind schedule for much of the growing season due to a generally wet and cool year. Wet spring soils delayed planting and emergence, but development was close to normal by June. From this point, cool temperatures slowed crop maturity. Harvest was held up by wet weather, but was mostly complete by the middle of November.

Soybeans: Acres, yield, production, and value, 2005-2009

Year	Planted	Harvested	Yield	Production	Price [1]	Value of production
	1,000 acres	*1,000 acres*	*Bushels*	*1,000 bushels*	*Dollars*	*1,000 dollars*
2005	2,000	1,990	38.5	76,615	5.73	439,004
2006	2,000	1,990	46.0	91,540	6.27	573,956
2007	1,800	1,790	40.0	71,600	9.69	693,804
2008	1,900	1,890	37.0	69,930	9.82	686,713
2009	2,000	1,990	40.0	79,600	9.40	748,240

[1] Marketing year average.

Soybeans: Stocks by quarter, 2005-2009

Crop year	December 1		March 1		June 1		September 1	
	On farm	Off farm	On farm	Off farm	On farm	Off farm	On farm	Off farm
	1,000 bushels	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
2005	33,000	22,600	22,000	14,600	11,500	6,850	5,000	3,300
2006	38,000	22,700	26,000	18,500	12,000	12,150	3,100	7,800
2007	26,000	29,000	17,000	23,900	3,500	12,200	2,500	4,580
2008	28,000	24,200	15,500	14,100	5,100	8,400	1,700	2,640
2009	27,000	25,300	13,000	13,600	3,800	7,134		

Soybeans: Percentage of acreage planted, 2005-2009

Year	Month and day						
	May			June			July
	10	20	30	10	20	30	10
2005	34	69	90	98	100	100	100
2006	37	56	73	90	99	100	100
2007	14	36	76	96	100	100	100
2008	29	59	87	96	100	100	100
2009	5	27	59	86	97	99	100
5-year-average	23.9	49.3	77.0	93.3	99.1	99.7	100.0

Soybeans: Percentage of acreage setting pods, 2005-2009

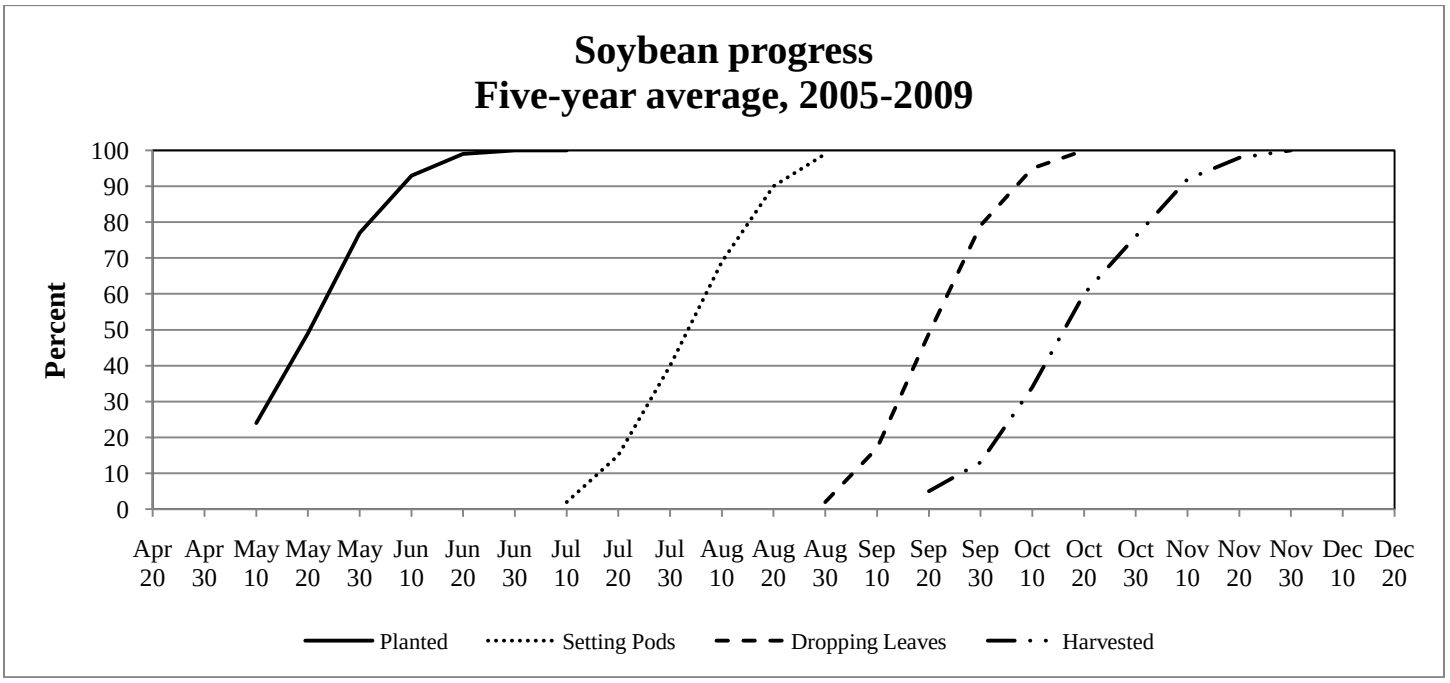
Year	Month and day					
	July			August		
	10	20	30	10	20	30
2005	3	22	55	83	97	100
2006	3	22	42	74	93	99
2007	4	22	48	75	97	100
2008	0	6	42	77	95	100
2009	0	3	13	36	70	95
5-year-average	1.9	15.0	39.9	69.1	90.1	98.7

Soybeans: Percentage of acreage shedding leaves, 2005-2009

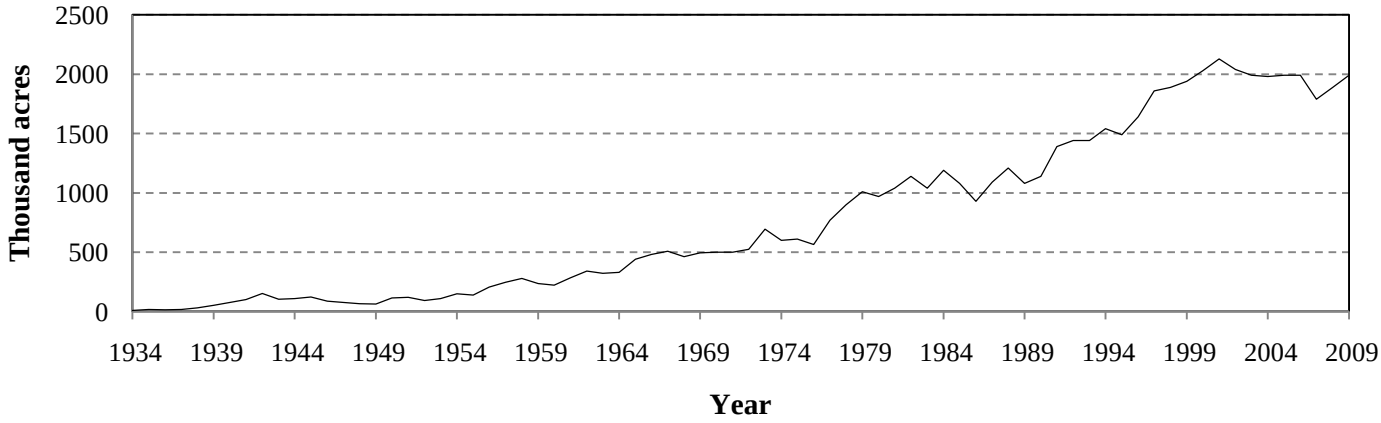
Year	Month and day						
	August		September			October	
	20	30	10	20	30	10	20
2005	0	3	37	82	95	100	100
2006	0	1	15	44	75	90	99
2007	0	1	10	42	76	98	100
2008	0	2	18	54	84	96	100
2009	0	0	2	23	64	91	99
5-year-average	0.0	1.6	16.5	48.9	78.7	95.0	99.6

Soybeans: Percentage of acreage harvested, 2005-2009

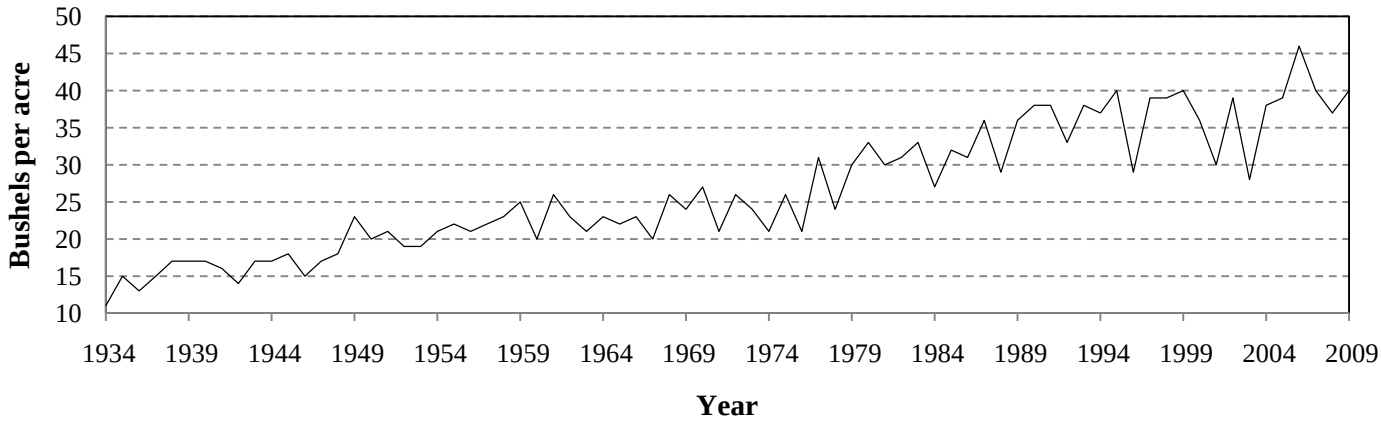
Year	Month and day								
	September			October			November		
	10	20	30	10	20	30	10	20	30
2005	0	11	33	69	87	93	99	100	100
2006	0	4	7	23	42	60	84	93	98
2007	0	1	10	33	60	81	96	100	100
2008	0	2	12	36	76	91	97	100	100
2009	0	0	2	6	35	57	83	96	100
5-year-average	0.0	4.5	12.7	33.5	59.9	76.4	92.0	97.6	99.5



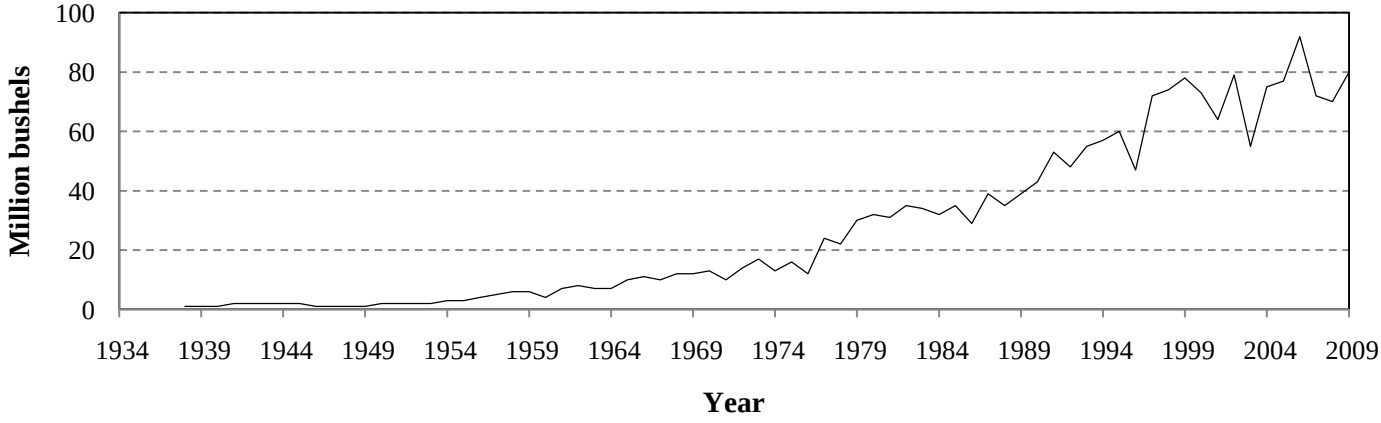
Soybean harvested acres, 1934-2009



Soybean yield, 1934-2009



Soybean production, 1934-2009



Sugarbeets

Acres planted to sugarbeets were estimated at 138,000 in 2009, up 1,000 acres from the previous year. Harvested acreage was estimated at 136,000, the same as last year. The yield was 24.4 tons per acre, down 4.3 tons from the previous year's record yield of 28.7. Sugarbeet production in 2009 totaled 3.32 million tons, down 15 percent from 2008. Planting was complete by mid-May. Sugarbeet crop development was good with little disease and weed pressure. Precipitation levels were ideal for the sugarbeet crop during the critical growing periods, leading to the record yield. Harvest started out slow due to rains, but proceeded to near normal by the end of the season. Piling began towards the end of October and harvest was finished by mid November.

Sugarbeets: Acres, yield, production, and value, 2005-2009

Year	Planted	Harvested	Yield	Production	Price [1]	Value of production
	1,000 acres	*1,000 acres*	*Tons*	*1,000 tons*	*Dollars*	*1,000 dollars*
2005	154	152	21.3	3,238	34.40	111,387
2006	155	154	23.2	3,573	38.00	135,774
2007	150	149	23.4	3,487	36.00	125,532
2008	137	136	28.7	3,903	44.00	171,732
2009	138	136	24.4	3,318	([2])	([2])

[1] Marketing year average.
[2] Published in February 2011.

Wheat

Michigan's winter wheat crop was 38.64 million bushels in 2009. Planted acres decreased to 620,000 acres from 730,000 the previous year. Harvested acreage was down 21 percent from last year to 560,000 acres. The average yield, 69 bushels per acre, was the same as last year. The value of the crop decreased 40 percent to $164 million. Huron, Sanilac, Lenawee, Tuscola, and Saginaw were the top five counties in wheat production for the second year in a row.

Winter wheat planting began the third week of September, 2008. Initially, plantings and emergence were behind the five-year average, but progressed ahead of the five-year average beginning in mid-October. Winter wheat fields received sufficient snow cover and weathered well throughout Michigan, despite several bouts of thawing and refreezing.

A cool, wet spring and summer impeded the progress of the crop. Though there were reports of Septoria leaf blotch, Fusarium leaf spot, cephalosporium stripe, and powdery mildew throughout the growing season, the primary problem that wheat producers endured was the sprouting in the head of white wheat. Harvest began in the middle of July. Harvest of this year's crop proved to be difficult due the moisture received during peak harvest periods. Many acres of soft white winter wheat began sprouting and was, therefore, abandoned or destroyed. Harvest began in mid-July and was completed by the middle of August.

Wheat: Acres, yield, production, and value, 2005-2009

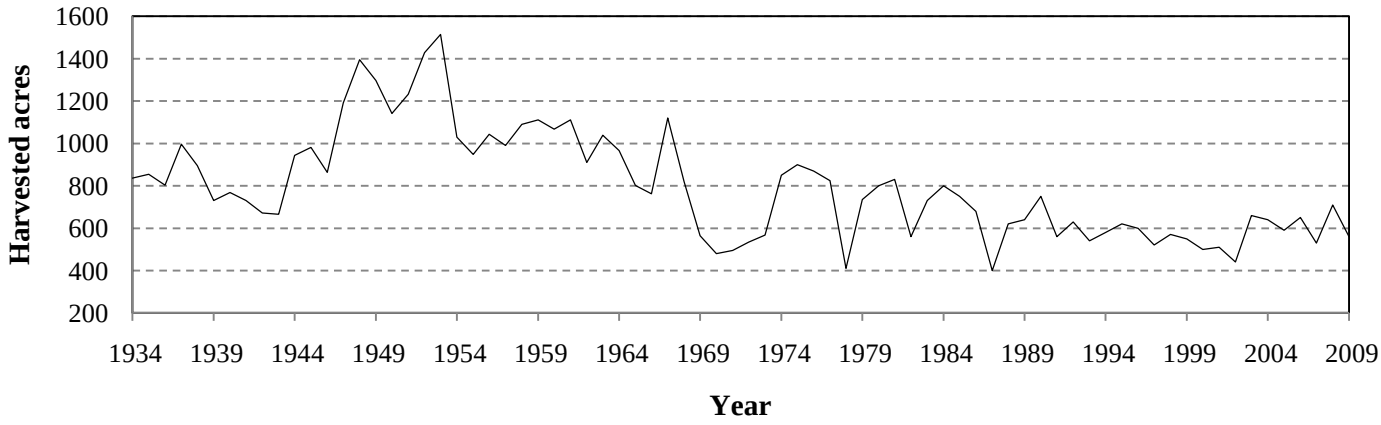
Year	Planted	Harvested	Yield	Production	Price [1]	Value of production
	1,000 acres	*1,000 acres*	*Bushels*	*1,000 bushels*	*Dollars*	*1,000 dollars*
2005	600	590	66	38,940	3.13	121,882
2006	660	650	73	47,450	3.41	161,805
2007	550	530	65	34,450	5.01	172,595
2008	730	710	69	48,990	5.63	275,814
2009	620	560	69	38,640	4.25	164,220

[1] Marketing year average.

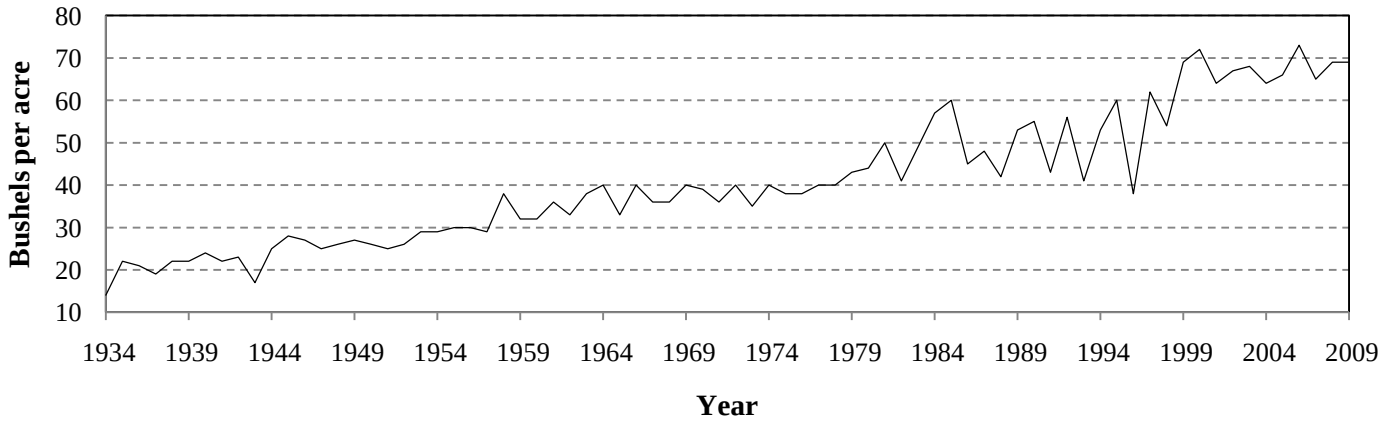
Wheat: Stocks by quarter, 2005-2009

Crop year	September 1		December 1		March 1		June 1	
	On farm	Off farm	On farm	Off farm	On farm	Off farm	On farm	Off farm
	1,000 bushels	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
2005	6,900	28,450	3,600	23,700	1,300	17,800	600	10,550
2006	7,500	33,200	3,800	25,975	1,400	18,400	300	12,250
2007	2,600	30,400	2,400	21,600	300	14,230	70	7,670
2008	6,200	30,350	2,600	26,800	1,900	21,600	850	16,700
2009	5,800	34,800	3,200	28,400	1,500	24,440	800	18,500

Wheat harvested acres, 1934-2009



Wheat yield, 1934-2009



Wheat production, 1934-2009